RealCo Incorporated

EPA ID Number: NYD060545209

Other (Former) Names of Site

AL Tech Speciality Steel Corporation, Ludlum Steel Company, Allegheny Ludlum Steel Company

Site Description

RealCo, Inc., formally known as AL Tech Specialty Steel, consists of a main plant area (70 acres) and a waste management area (50 acres). The site is located at Spring Street Road in Watervliet, New York. The main plant area is bordered by the Kromma Kill Creek, a railroad yard, a cemetery, and some undeveloped land. The waste management area is bordered to the north and west by a new residential development, and by undeveloped land to the east. The Kromma Kill and Spring Street Road border the waste management area to the east and south, respectively.

In 1997, AL Tech, then owned by the Korean firm Sammi Steel, filed for bankruptcy. In late 1999 the company emerged from bankruptcy, with RealCo Inc. named as the owner of the contaminated property at Watervliet. As a result, RealCo is responsible for remediating the contaminated media and structures at the site under the Resource Conservation and Recovery Act (RCRA) Corrective Action program, funded by parties responsible for the contamination, including several former owners.

Since 1908, various steel products were manufactured in the main plant area. Production processes resulted in a variety of wastes, including electric arc furnace dust, metal-enriched furnace slag, casting sand and furnace bricks, waste acids, spent pickle liquor, pickle rinse water, contact and non-contact cooling water, and oily wastes. The main plant area, which consists of numerous buildings, no longer supports steel manufacturing processes with the exception of the extrusion building, which is currently leased to ALTX, a Spanish-owned company.

The waste management area consists of a closed hazardous waste surface impoundment and a 17-acre landfill. The surface impoundment was closed in 1990, leaving hazardous waste sludge in place. A Resource Conservation and Recovery Act (RCRA) post-closure permit issued in 1992 addresses post-closure care of the surface impoundment's cover and the continued monitoring of the groundwater at this unit and the landfill. The landfill, which was used from 1957 to 1996 for disposal of production wastes, ceased receiving hazardous waste in 1982 and is subject to RCRA Corrective Action.

Site Responsibility and Legal Instrument

AL Tech first entered into a comprehensive corrective action Order on Consent with New York State Department of Environmental Conservation (NYSDEC) effective August 4, 1995, which was updated with RealCo on September 8, 1999. The original order was made part of the RCRA Corrective Action requirements in the existing New York State 6NYCRR Part 373 Post-Closure Permit. On February 4, 2000, RealCo entered into Orders on Consent with NYSDEC to implement the Landfill Reclamation and Closure Project and for the construction of a new outfall to the Hudson River.

Permit Status

A 6NYCRR 373 permit was issued to AL Tech Watervliet in December 1992 and expired in December 1997. The permit has been extended as required by State law and will stay in effect until issuance of the renewal permit. At this time an operating permit is not required for current operations at the waste management area. The facility will apply for a permit when post-closure standards will be required for the Waste Management Area.

Potential Threats and Contaminants

Main Plant Area

Sampling of the surficial soils, buildings, and pits within some of the buildings located at the Main Plant Area, revealed areas of inorganic contamination (arsenic, cadmium, chromium, lead, and nickel). The most extensive inorganic contamination occurs at and in the vicinity of the former melt shop and bag-house, and in front of the technical service/storage building; at these locations some of the metal-contaminated soil is classified as hazardous waste. In several other areas, elevated levels of arsenic, lead and polychlorinated biphenyls (PCBs) were detected in the surface soils. PCBs were also found in significant concentrations in the deeper soils at two small isolated areas of the scrap yard Solid Waste Management Unit (SWMU) and at the waste oil container storage area SWMU. Soil at both these SWMUs is also contaminated with biodegradable petroleum contaminants.

Groundwater in the area above the bedrock (the overburden) throughout the Main Plant Area is contaminated with petroleum hydrocarbons that leaked from the abandoned underground fuel oil storage tank and the underground piping used to transport the fuel to the various buildings. Some of this contamination found its way into the Kromma Kill Creek and its sediments. In the area near the pickle house, the overburden groundwater is contaminated with metals, primarily chromium. In the scrap yard the overburden groundwater contains primarily low levels of biodegradable petroleum contaminants. Some PCBs were detected in the groundwater near the deeper PCB soil contamination.

Waste Management Area

The primary contaminant in this area is chromium. It is found in the hexavalent form in

the furnace dust and in the reduced trivalent form in the wastewater sludge. Low levels of hexavalent chromium have contaminated the overburden groundwater in this area. The water quality and sediments of adjacent Kromma Kill Creek have also been impacted by metal contaminants that have migrated from the landfill.

Contaminated groundwater at the site does not pose a threat to human health since it is not used as a source of drinking water and no known water supply wells have been impacted by this groundwater. However, the State considers all its groundwater to be a potential source of potable water and requires it be be remediated to its groundwater quality protection standards. Workers sampling groundwater and handling its corrective measures do so following an appropriate health and safety plan.

The facility is fenced and secured so trespassers are not expected to come in contact with contaminated soils and structures. Corrective measures being implemented are being done in accordance with an appropriate health and safety plan. Off-site, human contact is not expected to occur with the contaminated sediment in the Kromma Kill Creek due to the topography of the area. Some of these sediments are currently being excavated removed and whatever remains will be addressed after the landfill cover is complete. There are no releases to the air that threaten human health as indicated by air monitoring at the facility's perimeter, and vapor intrusion into indoor air is not a concern since the Main Plant Area is currently not generally in use.

Cleanup Approach and Progress

Main Plant Area

In 1994, AL Tech implemented a groundwater recovery Interim Corrective Measure (ICM) at the Main Plant Area's pickle house to address contamination from pickling operations. This measure continues to operate and its effectiveness is being evaluated annually.

In 1997, surface soil contaminated with PCBs at concentrations over 25 mg/kg at the former waste oil container storage area were excavated and covered with clean fill.

In 2000, a collection trench was constructed as an Interim Corrective Measure to address off-site migration of groundwater contaminated with fuel oil. The trench's effectiveness is currently under evaluation. The contaminated soil that was excavated for the collection trench was removed and disposed off-site at a hazardous waste facility.

Since reclamation processing, storage and other activities will take place at the main plant area, other soil remedial activity will be postponed and reevaluated at a later date. Remediation and landfill closure at the waste management area is expected in the fourth quarter of 2003.

Waste Management Area

In 1992, the facility implemented an Interim Corrective Measure (ICM) to control off-site

migration by erosion of contaminants from the north face of the landfill. The final ICM design for reclamation and closure of the landfill was approved in March 2000 and has a threefold purpose:

- recover for sale stainless steel scrap from the landfill;
- recover for sale slag material that has a beneficial use as landfill cover; and
- reduce the volume, extent, and configuration of the landfill in order to prepare it for a final cover.

Two empty buildings at the main plant area will be decontaminated before and after being used for processing and storing reclaimed landfill materials. The landfill, which is expected to be reduced from 17 to 9 acres, will close using an impermeable cover along with a new leachate collection and transmission system. Closure designs will be submitted several months prior to completing the reclamation project, which began in March 2000, and it is expected to be completed in mid-2003.

Site Repository

Copies of supporting technical documents and correspondence cited in this site fact sheet are available for public review at:

New York State Department of Environmental Conservation Bureau of Radiation and Hazardous Site Management Division of Solid & Hazardous Materials 625 Broadway, 8th Floor Albany, New York 12233-7252